



IFWO

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PATENT APPLICATION: US/10/825,898

DATE: 09/01/2004

TIME: 13:06:27

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1 <110> APPLICANT: BOYLE, WILLIAM
 2 <120> TITLE OF INVENTION: OSTEOPROTEGERIN BINDING PROTEINS AND RECEPTORS
 3 <130> FILE REFERENCE: A-451K REV 09-10-03 54SEQ
 C--> 4 <140> CURRENT APPLICATION NUMBER: US/10/825,898
 C--> 5 <141> CURRENT FILING DATE: 2004-04-15
 6 <150> PRIOR APPLICATION NUMBER: US/10/825,898
 7 <151> PRIOR FILING DATE: 2004-04-15
 8 <150> PRIOR APPLICATION NUMBER: US 09/052,521
 9 <151> PRIOR FILING DATE: 1998-03-30
 10 <150> PRIOR APPLICATION NUMBER: US 08/880,855
 11 <151> PRIOR FILING DATE: 1997-06-23
 12 <150> PRIOR APPLICATION NUMBER: US 08/842,842
 13 <151> PRIOR FILING DATE: 1997-04-16
 14 <160> NUMBER OF SEQ ID NOS: 54
 15 <170> SOFTWARE: PatentIn version 3.1
 17 <210> SEQ ID NO: 1
 18 <211> LENGTH: 2295
 19 <212> TYPE: DNA
 20 <213> ORGANISM: Mus musculus
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 23 <222> LOCATION: (158)..(1105)
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 28 tcgcggagca gggcgcccga actccggggcg ccgcgcc atg cgc cgg gcc agc cga 175
 29 Met Arg Arg Ala Ser Arg
 30 1 5
 31 gac tac ggc aag tac ctg cgc agc tcg gag gag atg ggc agc ggc ccc 223
 32 Asp Tyr Gly Lys Tyr Leu Arg Ser Ser Glu Glu Met Gly Ser Gly Pro
 33 10 15 20
 34 ggc gtc cca cac gag ggt ccg ctg cac ccc gcg cct tct gca ccg gct 271
 35 Gly Val Pro His Glu Gly Pro Leu His Pro Ala Pro Ser Ala Pro Ala
 36 25 30 35
 37 ccg gcg ccg cca ccc gcc gcc tcc cgc tcc atg ttc ctg gcc ctc ctg 319
 38 Pro Ala Pro Pro Pro Ala Ala Ser Arg Ser Met Phe Leu Ala Leu Leu
 39 40 45 50
 40 ggg ctg gga ctg ggc cag gtg gtc tgc agc atc gct ctg ttc ctg tac 367
 41 Gly Leu Gly Leu Gly Gln Val Val Cys Ser Ile Ala Leu Phe Leu Tyr
 42 55 60 65 70
 43 ttt cga gcg cag atg gat cct aac aga ata tca gaa gac agc act cac 415
 44 Phe Arg Ala Gln Met Asp Pro Asn Arg Ile Ser Glu Asp Ser Thr His

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47	Cys Phe Tyr Arg Ile Leu Arg Leu His Glu Asn Ala Gly Leu Gln Asp						
48		90		95		100	
49	tcg act ctg gag agt gaa gac aca cta cct gac tcc tgc agg agg atg						511
50	Ser Thr Leu Glu Ser Glu Asp Thr Leu Pro Asp Ser Cys Arg Arg Met						
51		105		110		115	
52	aaa caa gcc ttt cag ggg gcc gtg cag aag gaa ctg caa cac att gtg						559
53	Lys Gln Ala Phe Gln Gly Ala Val Gln Lys Glu Leu Gln His Ile Val						
54		120		125		130	
55	ggg cca cag cgc ttc tca gga gct cca gct atg atg gaa ggc tca tgg						607
56	Gly Pro Gln Arg Phe Ser Gly Ala Pro Ala Met Met Glu Gly Ser Trp						
57		135		140		145	
58	ttg gat gtg gcc cag cga ggc aag cct gag gcc cag cca ttt gca cac						655
59	Leu Asp Val Ala Gln Arg Gly Lys Pro Glu Ala Gln Pro Phe Ala His						
60		155		160		165	
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62	Leu Thr Ile Asn Ala Ala Ser Ile Pro Ser Gly Ser His Lys Val Thr						
63		170		175		180	
64	ctg tcc tct tgg tac cac gat cga ggc tgg gcc aag atc tct aac atg						751
65	Leu Ser Ser Trp Tyr His Asp Arg Gly Trp Ala Lys Ile Ser Asn Met						
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67	acg tta agc aac gga aaa cta agg gtt aac caa gat ggc ttc tat tac						799
68	Thr Leu Ser Asn Gly Lys Leu Arg Val Asn Gln Asp Gly Phe Tyr Tyr						
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71	Leu Tyr Ala Asn Ile Cys Phe Arg His His Glu Thr Ser Gly Ser Val						
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73	cct aca gac tat ctt cag ctg atg gtg tat gtc gtt aaa acc agc atc						895
74	Pro Thr Asp Tyr Leu Gln Leu Met Val Tyr Val Val Lys Thr Ser Ile						
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77	Lys Ile Pro Ser Ser His Asn Leu Met Lys Gly Gly Ser Thr Lys Asn						
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80	Trp Ser Gly Asn Ser Glu Phe His Phe Tyr Ser Ile Asn Val Gly Gly						
81		265		270		275	
82	ttt ttc aag ctc cga gct ggt gaa gaa att agc att cag gtg tcc aac						1039
83	Phe Phe Lys Leu Arg Ala Gly Glu Glu Ile Ser Ile Gln Val Ser Asn						
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85	cct tcc ctg ctg gat ccg gat caa gat gcg acg tac ttt ggg gct ttc						1087
86	Pro Ser Leu Leu Asp Pro Asp Gln Asp Ala Thr Tyr Phe Gly Ala Phe						
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90		315					
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92	actaagagac atggccacg gtgtatgaaa ctacacagccc tctctcttga gcctgtacag						1255
93	gttgtgtata tgtaaagtcc ataggtgatg ttagattcat ggtgattaca caacggtttt						1315

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104 taggatgttg gtcaccaggt gcctttcaaa tttagaagct aattgacttt aggagctgac 1975
105 atagccaaaa aggatacata ataggctact gaaatctgtc aggagtattt atgcaattat 2035
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122 35 40 45
123 Met Phe Leu Ala Leu Leu Gly Leu Gly Leu Gly Gln Val Val Cys Ser
124 50 55 60
125 Ile Ala Leu Phe Leu Tyr Phe Arg Ala Gln Met Asp Pro Asn Arg Ile
126 65 70 75 80
127 Ser Glu Asp Ser Thr His Cys Phe Tyr Arg Ile Leu Arg Leu His Glu
128 85 90 95
129 Asn Ala Gly Leu Gln Asp Ser Thr Leu Glu Ser Glu Asp Thr Leu Pro
130 100 105 110
131 Asp Ser Cys Arg Arg Met Lys Gln Ala Phe Gln Gly Ala Val Gln Lys
132 115 120 125
133 Glu Leu Gln His Ile Val Gly Pro Gln Arg Phe Ser Gly Ala Pro Ala
134 130 135 140
135 Met Met Glu Gly Ser Trp Leu Asp Val Ala Gln Arg Gly Lys Pro Glu
136 145 150 155 160
137 Ala Gln Pro Phe Ala His Leu Thr Ile Asn Ala Ala Ser Ile Pro Ser
138 165 170 175
139 Gly Ser His Lys Val Thr Leu Ser Ser Trp Tyr His Asp Arg Gly Trp
140 180 185 190
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142 195 200 205
143 Gln Asp Gly Phe Tyr Tyr Leu Tyr Ala Asn Ile Cys Phe Arg His His

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149      Gly Gly Ser Thr Lys Asn Trp Ser Gly Asn Ser Glu Phe His Phe Tyr
150          260          265          270
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170      cgcc atg cgc cgc gcc agc aga gac tac acc aag tac ctg cgt ggc tcg      229
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177      Ala Pro Pro Pro Pro Ala Pro His Gln Pro Pro Ala Ala Ser Arg Ser
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179      atg ttc gtg gcc ctc ctg ggg ctg ggg ctg ggc cag gtt gtc tgc agc      373
180      Met Phe Val Ala Leu Leu Gly Leu Gly Leu Gly Gln Val Val Cys Ser
181          50          55          60
182      gtc gcc ctg ttc ttc tat ttc aga gcg cag atg gat cct aat aga ata      421
183      Val Ala Leu Phe Phe Tyr Phe Arg Ala Gln Met Asp Pro Asn Arg Ile
184          65          70          75
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186      Ser Glu Asp Gly Thr His Cys Ile Tyr Arg Ile Leu Arg Leu His Glu
187      80          85          90          95
188      aat gca gat ttt caa gac aca act ctg gag agt caa gat aca aaa tta      517
189      Asn Ala Asp Phe Gln Asp Thr Thr Leu Glu Ser Gln Asp Thr Lys Leu
190          100          105          110
191      ata cct gat tca tgt agg aga att aaa cag gcc ttt caa gga gct gtg      565
192      Ile Pro Asp Ser Cys Arg Arg Ile Lys Gln Ala Phe Gln Gly Ala Val
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198	Lys Ala Met Val Asp Gly Ser Trp Leu Asp Leu Ala Lys Arg Ser Lys	
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:5 M:271 C: Current Filing Date differs, Replaced Current Filing Date
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